

Questions

1. What are the procedures now used in your region for economic dispatch? Who is performing the dispatch (a utility, an ISO or RTO, or other) and over how large an area (geographic scope, MW load, MW generation resources, number of retail customers within the dispatch area)?

Response:

Economic dispatch within the Electric Reliability Council of Texas (ERCOT) is currently performed by two different parties, Qualified Scheduling Entities (QSEs) for the portfolios of resources that they (the QSEs) are responsible for and ERCOT for balancing energy. ERCOT dispatches resources for balancing energy based on economics on an ERCOT-wide basis when reliably able to do so. ERCOT performs economic dispatch on a zonal basis when reliability dictates the necessity to do so. Each QSE dispatches its generation economically and uses the balancing market and market prices to adjust its dispatch accordingly

The ERCOT reliability region serves approximately 85% of the electrical load in Texas. It is one of 10 regional reliability councils in the North American Electric Reliability Council (NERC). ERCOT is an Independent System Operator ((ISO) with a peak load of approximately 60,000 MW and installed capacity of over 70,000 MW. The minimum generation reserve margin planning criterion for the ERCOT region is 12.5%.

As a NERC member, the primary responsibility of ERCOT is to facilitate reliable power grid operations in the ERCOT region by working with the region's electrical energy industry organizations. ERCOT is the only reliability region in North America that is located completely within the borders of a single state, and it is one of two reliability regions that are also ISOs. The number of retail customers within ERCOT is approximately 6.1 million

2. Is the Act's definition of economic dispatch (see above) appropriate? Over what geographic scale or area should economic dispatch be practiced? Besides cost and reliability, are there any other factors or considerations that should be considered in economic dispatch, and why?

Response:

TXU Wholesale concurs with the Act's definition of economic dispatch: "the operation of generation facilities to produce energy at the lowest cost to reliably serve customers, recognizing any operational limits of generation and transmission facilities." In ERCOT, there is an effort to economically dispatch as much as practical for the entire interconnected grid. There is a consideration under way to improve the efficiency of this system, if cost effective, by increasing ERCOT's role in economic dispatch through

implementation of a nodal market design. It is imperative that limitations and/or constraints caused by the transmission system, environmental or other operational limitations be recognized and accounted for in any dispatch decision.

The geographic scale or area covered by the economic dispatch should be determined by the appropriate ISO or regional authority based on the characteristics of the transmission system and generating resources available. Cost, efficiency, and reliability are the primary factors that should be considered in dispatch decisions with reliability being the paramount concern. However, there may be other factors that impact dispatch decisions, including national security, environmental restrictions, weather (e.g., a hurricane), and potential damage to generators or transmission facilities from operations.

3. How do economic dispatch procedures differ for different classes of generation, including utility-owned versus non-utility generation? Do actual operational practices differ from the formal procedures required under tariff or federal or state rules, or from the economic dispatch definition above? If there is a difference, please indicate what the difference is, how often this occurs, and its impacts upon non- utility generation and upon retail electricity users. If you have specific analyses or studies that document your position, please provide them.

Response:

Within the ERCOT system, there is no difference in treatment of different classes of generation in regard to dispatch. Because of the competitive nature of the electricity markets in Texas, QSEs dispatch their portfolios of resources based on the unique operational characteristics of each particular generator to provide reliable service to their customers at the lowest possible cost consistent with good utility practice. The Public Utility Commission of Texas currently plans to implement a nodal market design using an LMP-based form of dispatch, called the Texas Nodal Market, within ERCOT beginning January 1, 2009.

4. What changes in economic dispatch procedures would lead to more non-utility generator dispatch? If you think that changes are needed to current economic dispatch procedures in your area to better enable economic dispatch participation by non-utility generators, please explain the changes you recommend.

Response:

No changes in ERCOT's economic dispatch procedures are necessary to increase non-utility generator dispatch. Because ERCOT operates a competitive electricity market, both utility and non-utility generation have equal opportunity to offer their resources into the energy market operated by ERCOT as well as through bilateral agreements with other parties (e.g.,

loads). The dispatch of those resources is based on the offers made by the generation owners.

5. If economic dispatch causes greater dispatch and use of non-utility generation, what effects might this have – on the grid, on the mix of energy and capacity available to retail customers, to energy prices and costs, to environmental emissions, or other impacts? How would this affect retail customers in particular states or nationwide? If you have specific analyses to support your position, please provide them to us.

Response:

TXU Wholesale believes that the competitive markets operated by ERCOT today provide the lowest possible cost of energy to customers while recognizing the need to maintain system reliability. Any change to require greater participation by a specific group of generators (regardless of ownership) could jeopardize reliability and possibly increase costs to some customers. Such a change would not be in the best interests of all customers.

6. Could there be any implications for grid reliability – positive or negative – from greater use of economic dispatch? If so, how should economic dispatch be modified or enhanced to protect reliability?

Response:

There is a tradeoff between pure economic dispatch and reliable dispatch. In today's ERCOT zonal market design (where QSEs dispatch their portfolio of resources), pure economic dispatch must be adjusted to consider the reliability aspects of the existing transmission system. If "greater use of economic dispatch" means a stronger emphasis on pure economics (and hence, less emphasis on system reliability), then reliability will likely be negatively impacted. On the other hand, if "greater use of economic dispatch" would require a move to a more centralized, unit-specific dispatch process (such as currently proposed in the Texas Nodal Market design), then additional market efficiencies may occur and reliability should not be impacted. The optimum solution requires a proper balance between economic and reliability-based dispatch.